

(d) a nucleotide sequence which is complementary to a nucleotide sequence set forth in (a), (b) or (c).

~~44~~  
~~45~~ (New) An isolated polynucleotide fragment of claim 44, wherein the polynucleotide fragment encodes for a polymerase polypeptide (POL).

~~46~~ (New) An isolated polynucleotide fragment of claim 44, wherein the polynucleotide fragment encodes for a virion core polypeptide (GAG).

~~47~~ (New) An isolated polynucleotide fragment of claim 44, wherein the polynucleotide fragment encodes for an envelope polypeptide (ENV).

~~48~~ (New) An isolated polynucleotide fragment of claim 44, wherein the polynucleotide fragment encodes for a virion core polypeptide (GAG) and an envelope polypeptide (ENV).

~~49~~  
~~50~~ (New) An isolated polynucleotide fragment encoding for a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 4, 5, 6 or 10.

~~50~~  
~~51~~ (New) An isolated polynucleotide fragment comprising a nucleotide sequence which has at least 90% identity to a sequence set forth in SEQ ID NO: 1, 2, 3 or 9, or a nucleotide sequence which is complementary thereto.

~~51~~ (New) An isolated polynucleotide fragment of claim 50, which encodes for a virion core (GAG), a polymerase (POL) and an envelope (ENV) polypeptide.

<sup>51</sup>  
52. (New) A recombinant nucleic acid molecule comprising a polynucleotide fragment according to claim 44.

<sup>52</sup>  
53. (New) A recombinant nucleic acid molecule according to claim 52 wherein the recombinant nucleic acid molecule comprises regulatory control sequences operably linked to said polynucleotide fragment for controlling expression of said polynucleotide fragment.

<sup>53</sup>  
54. (New) A vector comprising a polynucleotide fragment according to claim 44.

<sup>54</sup>  
55. (New) A vector according to claim 54, which is a virus or a plasmid.

<sup>55</sup>  
56. (New) A prokaryotic or eukaryotic host cell comprising a polynucleotide fragment according to claim 44.

<sup>56</sup>  
57. (New) An oligonucleotide comprising at least 30 nucleotides which are fully complementary to a sequence set forth in claim 44.

<sup>57</sup>  
58. (New) An oligonucleotide according to claim 57 which has the nucleotide sequence set forth in SEQ ID NO: 7, 8, 11, 12, 13 or 14.

<sup>58</sup>  
59. (New) A PoEV detection kit comprising at least one oligonucleotide according to claim 57 or 58.

<sup>59</sup>  
60. (New) A method for detecting PoEV in a nucleic acid containing sample comprising:  
(a) contacting the sample with at least one oligonucleotide of claim 57 under hybridization conditions; and

(b) detecting hybridization of the oligonucleotide to the nucleic acid in the sample;  
wherein detection of hybridization indicates that the sample contains PoEV.

<sup>60</sup>  
61. (New) The method of claim 59, wherein the oligonucleotide contains a label.

<sup>61</sup>  
62. (New) The method of claim 60, wherein the label is a radioactive, chemiluminescent or fluorescent label.

<sup>60</sup>  
63. (New) A pair of oligonucleotide primers for use in PCR amplification wherein each primer comprises at least 10 nucleotides complementary to a sequence set forth in SEQ ID NO: 1, 2, 3 or 9, or a sequence complementary to a sequence set forth in SEQ ID NO: 1, 2, 3 or 9.

<sup>63</sup>  
64. (New) A pair of oligonucleotide primers selected from the group consisting of SEQ ID NOs: 7 and 8, SEQ ID NOs: 11 and 12, and SEQ ID NOs: 13 and 14.

<sup>64</sup>  
65. (New) A method for detecting PoEV in a nucleic acid containing sample comprising:

? (a) contacting the sample with a pair of oligonucleotide primers as set forth in claim 63 or 64 under hybridization conditions;

(b) amplifying a nucleotide sequence between the two oligonucleotide primers; and

(c) detecting the presence of the amplified sequence;

wherein detection of the amplified sequence indicates that the sample contains PoEV.

<sup>65</sup>  
66. (New) An antisense oligonucleotide complementary to a messenger RNA for a GAG, POL or ENV polypeptide encoded for by the nucleotide sequence set forth in SEQ ID NO: 1, 2, 3 or 9, wherein said antisense oligonucleotide suppresses expression of a PoEV GAG, POL or ENV polypeptide.